When the Oceans Whirled Overhead

6

The Esoteric History of the Earth

By WILLIAM DUDLEY PELLEY



The Sixth of

The GALAHAD LECTURES

"When the Oceans Whirled Overhead"

BEING THE SIXTH OF

The Galahad Lectures

THE GALAHAD LECTURES constitute a great curriculum of information on the Unknown Esoteric History of the Earth, from the time of its conception as a planet, up through the Edenic period when the first forms of human life existed under the Great Water-Veil, into the Antediluvian world with its strange civilizations, and through the Atlantean and Egyptian epochs into the modern Christian. ℭ *These Scripts comprise the Instruction given as part of the Lecture Courses of Galahad College Summer School held in Asheville, N. C., in the summer of 1932 and have been recorded and preserved in this form for students of the Foundation Fellowship.* ℭ *The Foundation Fellowship is a nation-wide assembly of Metaphysical Students, sacredly searching for the true fundamentals behind life in Mortality and for accurate knowledge of the soul's enhancements in octaves higher than those of earth.*

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"When Oceans Whirled Overhead"

THE SIXTH LECTURE

BEGINNING with this Sixth Lecture, we depart from the type of instruction discoursed upon up to this point—that painted in a metaphysical background for the finite wonders that we perceive about us—and consider literal and material facts concerning this world in which we find ourselves. Which means that we are called to consider the origin and development of these mysterious locations in Abstract Space known as planets, on which each mortal scene is played, whether such planet be Earth or Mars. Human beings could not unfold and expand finitely unless they had stages on which to perform. They could not come back into a world of Shape in Substance, time and time again, to learn the lessons of circumscription, unless such Substance took definite pattern and provided a location that was at least identifiable to those who felt the reactions of it. Yet it is not altogether for purposes of abstract reasoning that we are now essaying to investigate this entrancing hypothesis of planetary structure and purpose at this time. The average man and woman in life today, not knowing the great natural processes taking place on, or behind the structure of, this finite plane, assume that great natural upsets and disturbances—frequently resulting in appalling loss of life—come from the fiats of a wrathful or dispassionate God, exercising Himself to chastise those who have performed malignantly toward their fellow man. We begin to see, when we delve into the manufacture of the heavenly bodies, and the processes and transformations through which they go, age by age, and generation

by generation, that they follow a code of laws with which a God of the old-fashioned theology has little to do.

First, we discern this sublime state of Cosmic Consciousness—or Consciousness of all that IS—which for want of a better term we call Holy Spirit, performing certain processes within Itself that give it a realization of all its capabilities. One of these phases is the projection of substance from combinations of electrical energy, positive and negative. Different combinations and speeds in these electrical assemblies give different essences of materials. Materials are cut, molded, conjoined, or combined, and identifiable pattern results in outer aspects, which men shall Shape. Shape is the parent of Measurement, and measurement is the forebear of Utility.

Now that essence of consciousness in which the positive and negative electrical energies operate is likewise given a name. We commonly term it Ether. Commonly, too, we are accustomed to describe it that "ether fills all Space." But "filling" is not exactly the descriptive word to use. Rather we should put it that "ether is a condition of Space in which electrical manifestation making for atomic construction of materials is contrivable."

Starting from the vague premise that the First-Cause Consciousness can get a result in energy display within Itself, we have the constituents of natural phenomena for evidence that a given amount of Space contains a given potentiality for a given amount of electrical energy, no matter what the multiplicity of final pattern as human life eventually perceives it. In other words, there is only SO much primordial electrical—or atomic—energy in a designated cubic area of celestial Space. This means likewise that there can only be a given amount of materialistic substance arrived at, within that cubic area. What the nature of the materials may be, resulting from the activity of this electrical or atomic energy, is therefore determined by the varieties of combination which these electrical impulses can effect within the field of their performance, subject to the interstellar influences bearing upon them. Within our own solar Time-Space area, we recognize the number of these as being 384—the combination of the uranium atom or substance. Why there are not ten thousand—or fifty million—we do not know, unless it is that in our particular corner of the universe, the Divine Enegy may not be potent enough to achieve them.

IN a given area between planets where there are no manifesting bodies of previously coagulated Substance, we conceive that there is existing a given quota of primordial Energy. This Energy, we say, is "free"—that is, it is without perceivable direction or manifestation in the pattern of Substance. All in all, we can say that it is a condition of interstellar Consciousness that can become perceivable as unit combinations begin to be arrived at. To make this plainer, we go out on a clear night and look at the North Star. Its light seems to travel from that essence of demonstrated celestial energy in a straight line to our eyeballs. Because it so travels, for all practical purposes of vision, we say "there is nothing between the North Star and our eyes but Space." But mayhap we are by no means telling ourselves the truth. Mayhap there is everything between the North Star and our eyeballs necessary for the construction or integration of a planet just as big and substantial as our earth, only it is existing in a "free" or uncondensed state. In other words, all that space which we imagine to be so "empty," may truly be filled with world-stuffs—in the form of undemonstrated materials—to precisely the quantity contained in the orb on which we stand to get our view of the star. Because we can't see it at the moment, doesn't prove that it isn't there. There happens to be such a thing as Atmosphere blanketing around our earth, but no one as yet has ever seen it. All of us, however, concede its existence, because we "breathe" it. In other words, we get our demonstration of its reality through other senses and physical functions than the eyes. But there is still another phenomenon about the condition of "free" space between the North Star and ourselves, that we are prone to ignore. It is the universality of direction which the Light display is achieving, and which parallels the existence of free energy in that area.

¶ We look at the North Star and accept that its light is traveling in a straight line, from star to our eyeball. It bears every appearance of giving out a ray, like a beam from a searchlight, that travels the millions of miles from the polar star to the spot where we may be regarding it. But if we move a foot to right or left, or a hundred miles to right or left, or even if we travel off this planet altogether and regard the same star from Venus or Saturn, the searchlight-beam effect still holds. What, therefore, is being demonstrated but the fact that the star is not giving out any searchlight beam at all, but that its radiance is being projected in every direction at once, and finding its way to every corner of the universe—so long as there be no solid bodies to

obstruct it. Light from that star, in fact, is as universal as the scent of an orange becomes universal when released in a room by merely puncturing the peel.

The light from that distant polar star—which is truly a great sun set at immense distance—is shining out in spherical pattern, and filling every nook and cranny of space as it goes. Nothing but the peculiar construction of our own organ of sight makes it appear to take the searchlight-beam pattern.

By the same token, we have Free Energy existing in interstellar space but unrecognizable until it attains an effect that our senses can react to, in their own peculiar and circumscribed function. It is as omnipresent as radio waves bringing the same voice or music into ten million homes and into whatever rooms in those homes the receiving-sets may be erected in.

But something suggests to all that omnipresent Free Energy that it should begin to coagulate, and get into pattern—to form a forthcoming planet. What is it? Where does the initial motivating Force of Direction for that primordial electrical potency come from?

The folklore contained in Genesis describes it that "in the beginning all was without form—and void—and darkness was upon the face of the deep. And the spirit of God moved upon the face of the waters. And God said: Let there be light, and there was light." All of which fixes up the Fundamentalists to a tee. All the explanation they require seems to be that "God did it," and beyond it they are not supposed to think.

What the Fundamentalists are not aware of is, that in the original texts, the word used, indicating God, was "Elohim"—which again translated literally meant, "the Spirits that were the stars." Take note, by the way, that the term is employed in the plural sense.

"The Spirits that were the stars" moved upon the face of the "waters" and brought Form out of the "deep" and the "void." WHAT spirits of WHAT stars? What is this ancient Chaldean lore trying to convey to us?—for it is Chaldean, and not Hebrew. The Hebrews plagiarized shamelessly from the wisdom of surrounding nations, exactly as do the Jews of today—when we let them!

WHAT it is all too patent that the Chaldean authorities were attempting to convey in the opening verses of the Book of Genesis was, that coagulation of Free Energy began in respect to our own tenantless area of Space when influences from surrounding heavenly bodies began to be of such a nature that the Free Energy in our own Time-Space Area was affected, and started to be driven in rotating pattern. Electrical planetary influence came into our Space area in one potency and traveled freely till it met an intersecting influence similarly traveling from some other centrosome. The two collided and moved at a right-angular direction till a third influence was similarly encountered. After a series of such meetings, colliddings, and re-directings, a circular movement was begun—or, as we say, etheric revolution was created. Whatever influences came to bear upon the mass antagonistically were overcome, if they happened to be less than the momentum already generated. If the influence was greater, and tending in the direction of the mass, then such influence only helped the mass on its way, to still more awesome momentum. The electrical display which, when incandescent, we commonly call nebula, could then be faintly perceived growing in our particular portion of the heavens—had there been watchers on other planetary systems to observe it, which there probably were!

Whereupon, this electrical nebula began to coalesce and combine in the different atomic assemblies, making for what man now knows as the planetary materials—the minerals, metals, chemicals, and vapors. The free Space in our particular portion of the heavens was becoming a gigantic chemical retort—or at least a laboratory—where atoms and their protons and electrons were finding their affinities, quite in the same fashion that they are made to repeat the process synthetically on a smaller scale, in the physicist's laboratory of today.

If the rationalizing reader asks at this point where the original energy came from, that helped to project the First Influences making for the first batch of planets—or heavenly bodies—whose influences went forth like the North Star's rays and affected Free Energy for the making of subsequent worlds, we must answer in terms of metaphysics that have to do with the components and eccentricities of Omnipotent Thought. These are the more logically expounded in the Liberation Scripts—particularly those Scripts that affect to give the Transcendental definition of God as differentiated from Holy Spirit. In this series of papers, we are confining ourselves more or less consistently to

astronomical physics. What is of the more urgent interest at this point, is the query concerning the behavior of the more complicated atoms in the mass. On this behavior rests the whole structure of planet composition and subsequent history.

Try to get this if you can—

The more complicated the atomic structure, as regards protons and electrons, the greater the density of the resultant "material," and the denser the resultant material, the nearer to the center of the Energy Coagulation the material will locate. In other words, the more furious and concentrated the atomic energy, the more readily it will act as the centrosome—or core—for that which is being manifested as an embryonic world. And about and around this core or "most furious and complicated display" lesser displays and simpler affinities will adjust themselves—in what physics ordinarily labels Specific Gravity.

¶ This means, in practical effect, that the heaviest of all materials will be found composing the core of the borning planet, and the lightest, or gaseous, materials will be found on the outer surface. Surface is, of course, more or less of a metaphorical term to use here, inasmuch as all the materials in such a nebulous world are in a state of stupendous flux. Such a nebula—that down future aeons will be a planet as solid as our present earth—is moving at a scarcely graspable rate, which like a Gargantuan wheel, would tend to keep the most of the lighter fluid or gaseous essences on its outer edges.

In all of this, take note, we are not departing far from the general exposition set forth allegorically in the opening chapters of Genesis. Scientists tell us that back in the times when our planet first took shape, it must have made a complete night-and-day revolution in a matter of three hours or thereabout, as compared to the twenty-four hours which it requires for a revolution today. This meant that all the lighter substances in the mass—water particularly—would be hurled, and held, something like 17,000 miles above what was later to become the planet's inhabitable surface.

So it was with our earth in its beginning.

Our earth, however, is an old, old planet. The time is ahead when it may slow down to a complete stop as it feels the restraining influence from other heavenly bodies. Then it will lose its atmosphere and emulate its moon, rolling through space a cold, dead satellite. Once this earth rotated on its axis every three hours, so fast was its speed, holding its water content aloft by sheer centrifugal force. This means that every drop of free water in its oceans was once in the skies,

17,000 miles in the skies. As the earth slowed its speed, the centrifugal force decreased and allowed those water oceans to fall. The last of these precipitated the Flood of Noah.

At present, as aforesaid, the earth has slowed to a point where it takes twenty-four hours to make its revolution. Its oceans are all on its surface and its heavens are clear. When our earth slows to a point that its revolution is almost imperceptible, or stops altogether, then is it in danger of being drawn into the orbit of some neighboring planet or sun that may be exhibiting a strong centripetal pull; thereat will come a flash in the heavens, similar to that seen any evening; a star of the first-magnitude will be born to live for an instant and then flash out. If it goes crashing into another heavenly body which has exerted its influence to pull or attract it, a new force of energy may be precipitated to travel forth and help build up a new planet in turn.

Thus it may be said that it takes two or more planets to make a new one. Wherever a collision precipitates a condition that causes points of interference or opposition in the exhibit of free radio-energy, or opposition or turning motion as I have described, out of the centrosome, you have some new form of creation in the Cosmos.

How many years it requires to get a spiral nebula to a point where it begins to assume a definite outline, like our present sun, we do not know, and it is unimportant because outside of this finite system of Cause and Effect, Time is no factor. But suppose you have a great spiral nebula congealing and condensing into such a form as our sun now exhibits. Great life-giver that it is, none the less, its condition represents the status of our own earth hundreds of millions of years in the past.

Would the hypothesis astound you, that our sun is potentially a new planet in process of condensation?

LET us carry the thought of this great spiral nebula made of uncountable trillions of electric granules. Think of the same process applied in the manufacturing of materials. If you have a nucleus of Positive electricity, with an affinity of Negative electricity traveling at an incredible rate of speed around it in an orbit, you have the composition of the electric granule, out of which Matter is built up. Different rates of velocity with which the Negative charge, or electron, is traveling about the Positive core or proton—or different combinations of electrons revolving around different combinations of protons—give different qualities of materials.

Hydrogen, for instance, is the simplest exposition of this great principle. One charge of Negative electricity revolving around a single Positive core, gives the composition of hydrogen, the simplest element. There maintains in ether all those types of electrical charges which must build up from impacts of various energies meeting opposition. This would seem to suggest Chaos in the original cosmos. So it is Chaos until straightened out, and those electrical charges straighten themselves out, by laws of specific gravity of a sort—those combinations which are the more complex forming the denser central mass and leaving the less complex, or "lighter," on the outside or the farthest point from the centrosome.

When a spiral nebula is evolved in space by impingements of energy projected out of neighboring heavenly bodies, the moment arrives when the mass begins to generate heat and therefore incandescence. That portion which turns the slowest is known as the Core. In this vast field of force, circular in outline, is projected the result that we call a sun, incandescent as its rays impinge on other substances and are diffused.

The old, old question: what makes the sun round, is not the platitudinous blither that we may have accepted, not knowing certain processes at work in the cosmos. What makes any sphere round? In the field of physics we are told that roundness comes to liquid bodies moving in free space because of an equalized pressure of atmosphere all over their surfaces with a strength of 14.7 pounds to the square inch. But in the case of planets out in airless space, there can be no such atmospheric pressure, for they may have no stratosphere about them and still be round. A theory not generally accredited now, but which presents many plausibilities for research, is that there may be such a thing as external energy pressure, operating precisely as air

pressure now exerts itself on free bodies. Molten lead, let drop from a high place, will shape itself into a sphere. Thus did our grandfathers in colonial time make their bullets; from a tall tower they dropped molten lead toward the ground. As it fell, it cooled. It cooled in perfect spherical shape because of an equal pressure of surrounding atmosphere upon the molten lead.

Newton believed that he discovered the Law of Gravity. He thought an apple fell to the ground because the earth "attracted" it. When we investigate some of these commonly accepted principles, we discover that just because they have been generally accepted does not necessarily mean that they are true. Someone may come along ultimately and "discover" that apples quitting boughs and landing on the ground are pushed by some force above them, and that in that pushing a radio-energy is applied from above. The etheric condition, of itself, may exert this pushing movement that we have always assumed to be the earth's attraction.

Coming back to the composition or manufacture of planets, we find one invariable Law of the Process performs: that each and every planet originates in the same way, and goes through definite stages of assembly or growth; and by turning our telescope about the heavens, and observing the various bodies in different states of materialization, we can trace definitely those stages of assembly or growth of our earth. If we turn a telescope on Saturn, we find a molten planet with a series of rings or belts about it. The ordinary person thinks these rings strange and wonders why Saturn has them in particular. He is not informed that such rings exist on Saturn because it is one planet falling within the reach of our lenses that is going through that particular phase of its generation and evolution. Undoubtedly there was a time, as we shall see presently in our surveys of Geology, when our earth exhibited the same phenomenon. Our earth likewise had its rings and belts. And incidentally, the fact that this is so, presents us with a stupefying array of evidence accounting for many of the theological concepts that have appeared in men's minds, but which have never been satisfactorily explained, even by astronomers.

THE Spirit of God moved upon the face of the waters," we are told in Holy Writ. And it is entirely proper for us to to ask: What waters?

We know that water is of chemical composition, compounded of two parts of hydrogen and one part oxygen. Therefore, to get this peculiar composition of chemicals, orderly processes of chemistry must have been going on for some time before God's Spirit could "move" upon the surface of the volume of the result. "And God said: Let there be light, and there was light." In other words, it became perceptible to mortal senses. "And He saw that it was good." That is, it served a constructive purpose in the Cosmos. "And God divided the light from the darkness." In other words, Matter had condensed to that point where pressure and heat were possible, and had become opaque enough to display its heat as incandescence. "And He called the light, day, and the darkness He called night." Take particular note here that nothing has been said as yet about the sun and the moon's being the cause of spatial illumination.

Your immature or illiterate Higher Critic will immediately demand: "How are you going to get day and night without the sun and the moon to determine the degree of revolution that the planet may be making in free space?" Let us therefore consider what goes on in the early stages of planet-making.

It is not generally known, that if our earth were to speed up its revolutions seventeen times as fast as its night-and-day revolution of the present, every drop of moisture within the earth's mass, to say nothing of the waters in its surface lakes and oceans, would fly off into the heavens and remain suspended by centrifugal force seventeen thousand miles above our heads. Thereafter nothing would bring it down to the earth's surface again but a gradual slowing down of the speed at which the earth revolved in space. The same principle would work that we saw displayed when, as children, we were sent after milk in the twilight. Bringing home the milk in a pail without a lid, we found that we could whirl it in a complete circle at arm's length without a drop of the milk spilling out—if we did it fast enough! If we were not careful in supplying the proper speed, however, the contents fell out and our clothes were drenched.

By the same process in physics, with the earth turning at seventeen times its present speed, all molten or liquid or gaseous material was held for ages at an exact distance from its surface according to the

specific gravity of the material itself. We can accept the hypothesis that the heaviest material was suspended at the lowest altitude from the earth, and the lightest material whirled at the farthest distance. Given the speed of the earth's revolution at any particular time, and the specific gravity of the material suspended or whirling above it, we can determine with reasonable accuracy at what altitude any given material was suspended. Thus we begin to get our first fundamental of the stupendous Ring System that must once have maintained about our earth, exactly as we see rings today about Saturn.

There is one astronomical theory, stoutly defended by scientists, that rings of telluric material around any given planet do not necessarily fall upon that planet, but congeal of themselves and form satellite bodies such as our moon, that continue to revolve around the planet so possessing those rings originally. Just how a ring, completely distributed around a core-planet and traveling at an incredible velocity, congeals or condenses into a spherical satellite in defiance of all known laws of physics applied to the motion of the ordinary wheel, is not made clear. This unique hypothesis goes on to declare that because planets like Jupiter and Saturn, farthest from the sun, seem to have the lightest specific gravity at present, while planets like Mars and Earth, nearer the sun, have the heaviest, the former must somehow be connected in their origins with the lightest and farthest forms of telluric substances originally swirling about the sun. Logic might decree that somehow this great ring system, revolving about and with a planet, came into friction with some influence on its outer edge that rolled portions of those rings into satellite-balls. But we confront difficulties in accepting this, when the spectroscope translates the light from such satellite planets and discloses metals and minerals in the composition of them that could not possibly have existed and whirled on the outer edge far away from the central planet. There is another and more reasonable explanation in the Annular Theory that we shall have expounded as we continue with these discourses.

All scientists and astronomers do agree, however, that at one time the earth's stratosphere extended so far into space that it included the orbit of our moon. In other words, it had a depth ranging anywhere from 200,000 to 700,000 miles before the earth's crust was reached. At the present time, with the earth's speed slowed to a point where it takes twenty-four hours for a given point on its surface to again present itself squarely to the sun, it is only a matter of a few thousand feet out from or above the earth's surface before we get into a condi-

tion where oxygen and nitrogen are so scarce that physical life cannot endure.

With the earth's surface traveling at the incredible velocity that permits a revolution in three hours, and gradually slowing down to a velocity that permits a revolution in twenty-four hours, we have a precipitation of the telluric substances with which the balling up of satellite planets has nothing to do. We can, on the contrary, figure at what point the heavier telluric substances would plunge downward to the earth's crust; and in confirmation of this theory, we find that the dates of geology disclose exactly the same laying down of substances on the earth's crust in such sequence and order. What more potent proof could be forthcoming, that the rings did not ball up into satellite planets, but fell to earth and thus disappeared, until now we have cleared skies, and layer on layer of the substances buried beneath the surface of the earth, that were once held in the skies by centrifugal motion?

NOW, knowing as we do that our planet has the spherical form, we can easily see that it has always had its greatest centrifugal velocity at the equator, just as the rim of a wheel travels faster than its hub. On the wheel basis, the earth, as the hub, spins at one rate, and the titanic rim that is the equator and all suspended over the equator far into space, spin at greatly increased rates; determining our speeds from a geometrical point beyond the rim.

If our earth at one time turned completely around in three hours, the probability is that telluric Matter in its primeval stratosphere was whirled aloft into belts and rings that increased in velocity six to eight-fold over that of the earth at its surface. If we use the equation of one revolution in twenty-four hours, and our planet is approximately 26,000 miles in circumference, the surface of our planet at its equator is traveling past points in interstellar space at the rate of about a thousand miles an hour. Consider, then, what the centrifugal force on the outer rim must have been when the planet made its revolution in three hours. I say, at that greatly increased rate, such stratospheric material would be cast into the skies as high as seventeen thousand miles —for a material of the specific gravity of water, less for the minerals and metals, and more for the gases. And the fact that it was so cast into the skies, or held in the skies, over untold aeons, does more than all else in human logic to solve the many mysteries that have perplexed

and befuddled humankind in the complex features of folklore and mythology accounting for planetary and human beginnings.

Let us give this great astronomical and geological principle the importance it deserves—an importance too little recognized by scientists as well as theologians. Because, determining this principle, and building upon it, we discern where the misunderstandings of geologists have come from, regarding the planet's origin and development. We likewise discern wherein those misunderstandings are directly and concretely responsible for equally wrong thinking and reasoning in rearing our spiritual and religious structures, making for the peculiar type of civilization we are experiencing at present.

We first confront our planet Earth, the forthcoming stage for a great human drama, as a spiral nebula in which are silicon, copper, lead, oxygen, hydrogen and all the other chemical compounds, mixed with prodigious amounts of carbon spewed up from a hundred thousand smoking volcanoes and fissures in the new planet's crust when the core has been formed and the spherical shape begins to develop. Whirling at a velocity that provides it with a three-hour day and this speed gradually decreasing, its core or nucleus acquires a denser and denser specific gravity as telluric materials are laid down upon it, making for weight. These materials are laid down in incalculable tonnage as the core's speed decreases and the centrifugal force is lessened, allowing the suspended rings to fall and add to the volume of that nucleus. As these rings are thus precipitated crustward, and the weight of their substances applied, their pressures make heat; heat calls for expansion, expansion means explosion of some kind, and high into the skies again are projected the original precipitates in the form of carbon, or partially consumed telluric substances, from the furnace of the molten interior.

Thus over and over again, the process is repeated, with the burned or molten material in the deep interior fusing together and making a compact center. Always a refining or combing process is going on overhead, the precipitates of greater density staying on the surface of the growing nucleus, and exploding only the lighter precipitates into the heavens again. Meanwhile the planet, because of its growing weight, and also the friction of substances whirling against ether on its outer edge, is slowing down in velocity. After a long period, it follows that all substances must fall down to stay down, the last to descend being hydrogen and oxygen in the form of water.

NOW the question of carbon and its place in an evolving planet, needs a moment's special consideration. What is carbon and why does it play such an important part in this nebular ring system? Suppose we take such a homely illustration as your fireplace in your modern home. ¶ You put fuel in your fireplace and set it afire, season after season. In the subsequent combustion, a portion of that fuel is released into your room in the form of heat. A portion falls to the hearth as ashes. But by far the greater portion travels up the flue in the form of carbonaceous smoke. As it travels upward, particles cling to the rough surface of the bricks making the chimney; they become charred over and we say that the chimney is filling with soot. That amount of carbon that does not adhere to the bricks, reaches the outer air over your roof, and in spewing forth is recognized as smoke. If you go into the yard, however, and watch this vomiting smoke, you will see that it is heaviest and blackest at the point where it leaves the chimney. In the exact ratio that it travels into free air, it begins to diminish in density and gradually disappears. What truly is happening? Where does smoke go? It unites with air, or oxygen and nitrogen, and is chemically changed into an invisible gas.

Such carbon, however, will not unite with oxygen and hydrogen, or water, and does not in the greater fireplace process that is the infant earth. It becomes instead, wrapped up in water, or insulated by water, and in this insulation is prevented from combining with air and disappearing.

It is shot into the skies, as water containing it is driven high above earth to escape its heat. In that status it will stay preserved and suspended so long as the water insulating it is thus preserved and suspended. Now consider another point—

There comes a time when your chimney walls are so encrusted with carbon that it catches fire of itself. Remember that carbon is burnable material that has not completely combusted. You say that your chimney "burns out." In this process, you have a miniature explanation of the phenomenon of coal.

Coal is not petrified vegetable material as ignorant people popularly suppose. Because it is often found impressed with fossiliferous material, patterns of ferns and leaves, a wrong idea as to its origin has been given out. We shall see in a subsequent discourse how fossils of ferns and leaves leave their marks in carbonaceous strata that are

reasonably close to the surface of the planet. But coal as carbon is laid down by first having been combustible material that has not gone through the process of complete combustion, being lifted into the skies, being precipitated upon earth anew along with the great deluges, being covered up by sedimentary strata and left for mining for future generations of mortals. Thus it is not the "buried sunlight" of the sentimentalists. Those who think of coal as metamorphosed vegetable matter are ignorant of the fact that beds of pure graphite, a basic form of coal, are found deep down under the earliest pre-Laurentian rock—rock admittedly formed ages before the first leaf or blade of grass ever put in an appearance on the earthly scene. How did it get there, if the carbonaceous forms that make for both graphite and coal are derived from decaying vegetable forms? And further, if coal were derived from decaying vegetable forms, why should not the greatest coal-beds be found in the vicinity of the equator where vegetable putrefaction and disintegration are greatest? The fact remains that they are not. Equatorial coal is not only the sparsest, but the poorest in quality. On the other hand, the greatest and richest beds are discovered in the north and south temperate zones, growing increasingly heavy as the poles are approached. Why at the poles? Because centrifugal force is least, almost to the point of zero, at the poles, and thus the precipitation of combustible stuffs from altitudinal suspensions would be heaviest there as the decreasing centrifugal velocities proved inadequate to sustain them. But once having come down, reposing on the earth's crust, there would be another type of centrifugal force immediately operating on them. That would be the spherical contour of the planet. Bulging toward the equator, where the globe turned fastest, there would be a tendency to spray from the poles toward the equator while this deposited strata lay in an igneous state. As the material became distributed thinner and thinner in the direction of the faster-turning equator, it would make the carbonaceous deposits thinner and thinner, and of increasingly poor quality. Thus the nature of equatorial coal is accounted for.

WHEN we study the rocks and minerals, we find a projection of similar density from the poles southward or northward toward the equator, as the case may be. At the equator, or throughout the equatorial regions, we find what might be termed the residue, of all these telluric materials that originally reached the earth from on high by precipitation near the poles where the centrifugal force of the swirling stuffs decreased and finally permitted them to fall. In other words, they left the equatorial rim, or fastest point of motion, and slid off toward the poles, as the planet's speed lessened. This sliding-off process was irregular or gradual because of the lessened speed of various areas of the planet's surface, centrifugally speaking, and the result was a series of belts or canopies covering the entire span of the north and south temperate zones. One by one these belts came down as the planet lost momentum over untold periods of time, leaving open spaces or clear areas at the poles themselves—open spaces, as we shall see, that engage no small notice in the literature, mythology and folklore of all ancient world peoples.

There were many substances in these rings that had the same specific gravity as carbonaceous coal and would therefore be found in the same descending belt or ring with it, thus guaranteeing their presence in the subsequent geological strata when the precipitation had taken place. Thus we find the infusion of many substances over, through, and under, the various strata.

The periods of time through which this must have taken place, are appalling to contemplate. Each day this earth turns more and more slowly. This slowness is so imperceptible as to seem almost negligible. By such a measuring-stick in the present, one should grasp the lengthy periods it required for each one of these bands or canopies of materials of a certain specific gravity to work its way poleward from the equatorial mass and finally reach a point where centrifugal force could not sustain it aloft.

The last precipitations at or near the poles would be chiefly composed of water. These water precipitations, coming down close enough to the polar surfaces to contact arctic cold, would complete their descent in the form of colossal and instantaneous avalanches of snow. That which would be a flood similar to the Flood of Noah, in temperate or equatorial lands, would mean a vast fall of snow-particles in the polar areas. So sudden was this snow precipitation in many times and places that animals like the arctic mammoths were caught with their

trunks upraised, conveying vegetable nourishment from treetops to their mouths. I have talked with reliable visitors to extreme northern lands who have seen these snow-entombed monsters.

One friend of mine declared that while traveling in extreme northern Canada, he witnessed from afar a stupendous snowslide. At one point the snow seemed to break in a sheer vertical wall of ice, leaving exposed a mammoth that had been so entrapped, probably at the instant of the Water Ring Precipitation which was called, farther south, the Flood of Noah. So fresh was the meat that when my friend drove his dog sled close to the exhibit, the canines got out of control, threw themselves upon the refrigerated carcass and began to consume it. The mammoth had been so well preserved that blood was discernible in the veins of its eyeballs. The suddenness with which the entombing snow had fallen, was proven by the fact that the animal's stomach was filled with half-digested food which had entered it thousands of years before modern times.

For generations there has been dissension among scientists and geologists concerning the true causes of the Glacial Epochs. Time after time the northern surface of our planet, and the extreme southern areas as well, have been buried under polar ice-caps. Gradually these worked their way southward and northward, from the Poles, in glacial advances, entering the warmer temperate zones and melting, dropping their loads of telluric silt and boulders, until the entire ice caps had disappeared. Contrary to general belief, little new snow falls in either polar circle itself. The cold is so intense the year around, that there can be no actual melting of snow to rise in the form of evaporation and be precipitated downward. Explorers in the extreme north have found dog-sleds, supplies, and bones of deceased explorers, lying on the snow-covered ground as nakedly as though they had been strewn there a matter of hours only. True, there are occasional blizzards of unmitigated fury. But a blizzard is only a blowing about of free snow already precipitated.

Glaciers of the glacial or ice ages, were merely vast packs of snowfalls resulting from the water-ring precipitations. As each ring fell, it laid down its snow blanket which in process of time was thrown southward by the centrifugal force due to the peripheral speed at the bulging equator. Coming down into the north and south temperate zones, the snow disintegrated as water. And so long as there were water rings in the sky to float north and south from the equator and fall in the vicinity of the poles, there would be succeeding glacial ages.

The last water-ring has now fallen from the skies—it fell as the well-known Flood of Noah—which means that the last polar ice-cap has been laid down.

Both Lemuria and Atlantis probably existed during the closing phases of this water-ring precipitation. For hundreds of thousands of years men probably looked into the heavens and saw wonders that have now passed forever from the sight of mortal men. And underneath that gigantic canopy—over that portion of the earth that was able to sustain the belts of water and telluric material on the whirling wheel principle—that extended nearly to the poles, where the arctic cold came in, man experienced a greenhouse condition of tropical heat.

THE movement of the rings and belts poleward, was of course so imperceptible that a whole arctic ice-cap would have time to melt, and tropical conditions prevail up near the top of the world, before the succeeding ring or belt fell and smothered northern or southern extremities with new polar ice-caps. Far into the northern and southern polar worlds, scientists find forms of plant life that approximate those found in the equatorial countries of the present. There is of course, a variation in the polar axes of the earth. The oldest records purport to remark on twelve polar deviations, occurring, 21,000 years between each. Remains of crocodiles have been found in northern Siberia, their original home, and these reptilian graveyards have been mined as an invaluable source of commercial ivory. It is unthinkable, however, that these reptiles should have waited to be carried into realms of arctic cold, by planetary deviation. The more plausible theory would seem to be that they existed in the north under the greenhouse roof of the water-ceiling and were caught and exterminated, like the mammoth mentioned, by the sudden avalanche of snow falling from a height of 17,000 miles and burying them in an instant of time—exactly as a meteorite would shatter them if they were caught directly in its pathway.

We shall discern, in developing this theme, where the statement came from, that "God divided the waters which were above the firmament from the waters which were below the firmament." Literally there was a stupendous ocean high in the stratosphere, exactly as there were water oceans on earth, but the latter were too impregnated with material of heavy specific gravity to allow them to join the cleaner and clearer waters whirling aloft in the skies.

Corroborating the account in Holy Writ again, this quite scientific hypothesis would also account for the succeeding Garden of Eden narrative. For beneath such a greenhouse roofing, man would live in an Edenic condition; he would exist in a state of nudity purely because of the planetary heat; he would be in a state of "innocence" because he would be unable to see the starry heavens beyond this screening water-veil and realize the location of himself upon a planet in universal space. The whole hypothesis of Genesis, corroborates and confirms the hypothesis of the water-veil condition, even to the serpent symbology that puzzles so many practical-minded people.

As we shall see presently, all these water-rings and belts, flowing and deploying in action seventeen thousand miles overhead—at a height that would make detail more or less indistinguishable—moving from west to east, would present the aspect of a tree growing from horizon to horizon. This gave mankind its first idealism of a Tree of Life, guarded by a serpent that we are told tempted the Mother of All Living. Is it difficult then to perceive that the great band of carbonaceous material, that was thickest at the equator, and most discernible because it was lowest in altitude, should have appeared to archaic man as a serpent coiled in the center of the branches of this stupendous Sky Tree of Life?

Those water-rings and canopy-veils, as they broke away one by one toward the north and south from the equatorial mass, must have assumed strange shapes. Outside and beyond them, though forever screened from actual view, was the sun, the moon, and the higher stars. Coming in through the polar openings, where there was no centrifugal force to maintain any suspensions, was the radiance of the sun, obscured from all other areas of the earth. Striking the opposite sides of this encircling water-blanket, its radiance was diffused, creating a display of splendor such as the eye of man has never looked on since.

As the more solidified earth-core moved from west to east at a faster pace than the vaporous and carbonaceous material held in suspension overhead, by centrifugal force, human beings on the surface of that solidifying earth-core would perceive such vaporous and carbonaceous material in long waving bands that appeared to move in the opposite direction, from east to west.

From such optical phenomenon could easily come the legend of the Tree of Life. Carbonaceous, striated bands in this rippling "tree-vapor" would wear every aspect of a serpent twined in the branches

of that tree. Under the ceiling made by such suspended waters, the terrain condition would be hot-house misty, with plant life growing to prodigious proportions without the killing, actinic ray from the naked and unfiltered sun's light to arrest them.

We know that Science has corroborated the one-time existence of the gigantic horsetail ferns. And the Book of Genesis says plainly that "a mist went up from the ground," in the allegorical Garden of Eden, "and watered it."

This "mist that went up from the ground" would be an impossible wonder of physics, when we stop to think of it, unless the conditions prevailed which we are considering. How could a mist "go up" from the ground, and yet at the same time "water it?" Why didn't the water-mist stay in the ground where it was? Why "go" anywhere?

¶ But when we consider an earth whirling much faster than at present, we know from the ordinary laws of motion that free water, as in the oceans of the present, could not have adhered to the planet's surface. It would have been flung up into space and sustained there, its height depending positively upon the earth's revolutionary speed at any given moment, year, or cycle of planetary development.

This massive water-volume, containing all the waters that are in the seven seas at present, would have formed a universal canopy over the planet's surface, screening man's view of intersellar space, and presenting conditions beneath it quite like the misty conditions which we find prevailing in behind Niagara Falls at present. There was this difference between conditions under that water canopy then, and in behind Niagara Falls now, however: the internal heat of the earth, which had not cooled to its present temperature, made a gigantic spherical radiator of its much thinner crust. In behind Niagara Falls of the present—as anyone knows who has taken that famous trip—the atmosphere is chill and dank. Under the water canopy of the antediluvian world, the globe's internal heat, coming much closer to the surface than today, made a hot-house condition where vegetation grew as lush as in our tropics of the present, and where human creatures went nude because clothes would have been insufferable.

Here was the true Garden of Eden condition, I say again, and it extended over the whole earth, not merely throughout one little traditional corner of Mesapotamia.

The radiance of the sun, filtering through these oceans suspended in the skies, turned the world a delicate pearl-gray, while to north and south, in the neighborhood of the poles where there was no centrifugal

motion to hold the ocean waters suspended, daylight entered through openings that described an archway—because only a half of the circular openings over each pole could be seen by a human spectator standing on the planet's surface at any given point.

When we know the truth about this antediluvian condition of the world, the Garden of Eden allegory does not seem so fantastic.

Science and theology have narrated what DID happen, but the reasons WHY it happened, are not so clearly understood or expounded.

Anyhow, the faster rate at which our globe once whirled, indicates that no water could have been allowed to be deposited upon its surface. All was mist, under the great Water Canopy obscuring earliest mankind's view of the heavens. As the earth's speed slowed, the centrifugal force was weaker at the poles, and finally must have reached a point of weakness where the waters and their contained materials could not stay suspended but plunged to earth.

Between the cooling off of the planet's surface so that plant, animal and human life could endure upon it, and the clearing of the heavens —so that present atmospheric and weather features could prevail— was the great Garden-of-Eden Period on the planet, wherein man went stark naked because clothes of any sort would have proved insufferable, and of which we shall hear much as we look at the Biblical story of creation in the light of Astronomy and Geology!

As we shall see in forthcoming Lectures, the condensing, cooling, and shrinking planet—feeling the restraining influence from other heavenly bodies—gradually slowed down. Over uncountable aeons of time, the run of its day began to lengthen, because the slower a planet whirls, the longer its day and night.

As the planet slowed, and its days and nights grew longer, the vast oceanic water-content held aloft in the skies, began to come closer to its surface and the bulk of it slide off in the direction of either Pole, where the centrifugal force was weakest.

Finally, when the earth's motion reached the exact point where this great water-bulk could not be held aloft, the latter took to falling upon the earth's surface in a series of Floods.

The last great water-canopy precipitation, which cleared the skies of suspended water for all time, was the catastrophe that ended the hothouse condition prevailing in the legendary Eden, and made Man put on clothes. He had to don clothes, for he began to feel the influence of the zero cold that was reaching him unobstructed out of interstellar space. If he hadn't donned clothes, he would have frozen to death.

¶ Moreover, with the unobstructed heavens visible to his gaze at last, Man grasped that he was on a heavenly planet, and got his relationship to all the other celestial worlds. He had thereby "eaten of the knowledge of the Tree of Life," and become as a God in his own right.

The Edenic condition ended and Man's troubles in a world of changing weather conditions began.

More of this later, as we consider the Lecture on the Edenic Aftermath—"When the Mississippi Ran Northward!"